

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 May 2004 (13.05.2004)

PCT

(10) International Publication Number  
**WO 2004/039479 A1**

(51) International Patent Classification<sup>7</sup>: **B01D 53/14**,  
53/92, 53/00, F01N 3/04, C05C 11/00, A01G 9/19, B01D  
53/84

(21) International Application Number:  
PCT/CA2003/001649

(22) International Filing Date: 28 October 2003 (28.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2,409,883 29 October 2002 (29.10.2002) CA

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: FERTILIZING SYSTEM AND METHOD BY EXTRACTING NITROGEN COMPOUNDS FROM COMBUSTION EXHAUST GASES

(57) **Abstract:** A fertilizer system is provided using extraction of nitrogen compounds and other plant nutrients from combustion exhaust gases, and which is particularly suited for use with an agricultural irrigation system or engine driven plant care equipment including self-propelled tractors, mowers and the like. The system includes an exhaust chamber in communication with the motor driving a pump of the system for receiving the exhaust gases therethrough. Water is injected into the exhaust chamber for mixing with the exhaust so that the steam being formed absorbs various nitrogen compounds and other plant nutrients from the surrounding hot exhaust gases. The steam is subsequently condensed in a condensing chamber from which condensate is collected and dispensed into the inlet of the pump with water circulated therethrough. The water is thus enriched with various nitrogen compounds and other plant nutrients absorbed from the exhaust gases before being dispensed to a planted area by an irrigation system or a sprayer attachment on a self-propelled tractor, mower and the like.